## Abstract

The invention relates to poly(ADP-ribose)polymerase (PARP) 5 homologs which have an amino acid sequence which has

- a) a functional NAD+ binding domain and
- b) no zinc finger sequence motif of the general formula

10 CX<sub>2</sub>CX<sub>m</sub>HX<sub>2</sub>C

in which

m is an integral value from 28 or 30, and the X radicals are, independently of one another, any amino acid;

and the functional equivalents thereof; nucleic acids coding
15 therefor; antibodies with specificity for the novel protein;
pharmaceutical and gene therapy compositions which comprise
products according to the invention; methods for the analytical
determination of the proteins and nucleic acids according to the
invention; methods for identifying effectors or binding partners
20 of the proteins according to the invention; novel PARP effectors;

and methods for determining the activity of such effectors.

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